



## **South Carolina Public Service Authority (Santee Cooper) Clean Air Act Civil Settlement South Carolina**

**Overview:** On March 16, the U.S. Environmental Protection Agency and the Department of Justice, along with the State of South Carolina, announced a major Clean Air Act (CAA) New Source Review Program (NSR) settlement with the South Carolina Public Service Authority (Santee Cooper) to resolve CAA violations at several of the company's coal-fired power plants in South Carolina.

Under the settlement, Santee Cooper will spend \$400 million between now and 2012 to install state-of-the-art pollution controls to substantially decrease emissions. This agreement requires Santee Cooper to install or upgrade existing state-of-the-art air pollution controls on more than 83 percent of its existing coal-fired megawatt generating capacity. All of the units, and two proposed new coal-fired units, must comply with a systemwide emissions rate and tonnage cap for sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions that decline over time.

Approximately 70,000 tons of SO<sub>2</sub> and NO<sub>x</sub> emissions will be reduced annually from ten units at four coal-fired electricity generating plants in South Carolina. The consent decree requires Santee Cooper to retire or restrict pollution emission allowances or credits that result from this agreement. Santee Cooper will also pay a \$2 million civil penalty, \$700,000 of which will go to South Carolina, and will spend at least \$4.5 million to finance projects that are environmentally beneficial.

**State Participation:** The State of South Carolina was an active partner in the negotiations and was instrumental in obtaining the agreement's significant pollution reductions. South Carolina is a signatory to the consent decree and a co-plaintiff on the United States' Complaint and will be a key player in the consent decree's implementation.

**Company:** Santee Cooper is a quasi-public South Carolina utility that operates four coal-fired power plants, a hydro plant, a nuclear plant, and several natural gas plants. The proposed settlement encompasses ten units at four coal-fired power plants and two proposed new coal-fired units. The ten units emitted over 130,000 tons of SO<sub>2</sub> and NO<sub>x</sub> in 2002.

**Power Plants Enforcement Effort:** The Department of Justice at EPA's request has filed lawsuits against several coal-fired electric utilities, most recently in January against East Kentucky Power Cooperative. This series of cases seeks to bring the coal-fired power plant industry into full compliance with the New Source Review requirements of the Clean Air Act.

The Santee Cooper settlement represents the seventh judicial settlement under the power plants enforcement effort. To date, EPA has reached similar settlement with: Alcoa (Rockdale, TX Facility)(industrial boiler); PSEG Fossil; Southern Indiana Gas and Electric Company (SIGECO), Culley Station; Tampa Electric Company (TECO); Virginia Electric Power Company (VEPCO); and Wisconsin Electric Power Company (WEPCO). The six previous settlements, along with this agreement, reduce annual pollution emissions by approximately 660,000 tons and require the installation of over \$3.9 billion worth of state-of-the-art air

pollution controls.

**Clean Air Act Violations:** Based on information received from the company, EPA alleges Santee Cooper violated the Clean Air Act by undertaking construction activities that increased pollution at some units without first applying for an NSR Clean Air Act permit. An NSR permit would have required Santee Cooper to take steps to reduce emissions at the time of the activities.

**Environmental Benefits:** This settlement requires Santee Cooper to install state-of-the-art air pollution controls on certain units and upgrade other existing air pollution controls. The controls will result in the removal of approximately 37,500 tons per year of SO<sub>2</sub> and 29,500 tons per year of NO<sub>x</sub> from Santee Cooper's existing coal-fired units. The settlement also requires Santee Cooper to retire excess SO<sub>2</sub> emission allowances from its Acid Rain allocations and restrict trade of its NO<sub>x</sub> allowances.

**NO<sub>x</sub>:** Nitrogen Oxide causes a variety of health problems and adverse environmental impacts, such as ground-level ozone, acid rain, particulate matter (PM), global warming, water quality deterioration, and visual impairment. Nitrogen oxides plays a major role, with volatile organic chemicals, in the atmospheric reactions that produce ozone.

**SO<sub>2</sub>:** High concentrations of sulfur dioxide affect breathing and may aggravate existing respiratory and cardiovascular disease. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. Sulfur dioxide is also a primary contributor to acid deposition, or acid rain.

**PM:** Health effects of PM include increased hospital admissions and emergency room visits, increased respiratory symptoms and disease, decreased lung function, and alterations in lung tissue and structure and in respiratory tract defense mechanisms and premature death. PM also is the major cause of reduced visibility in many parts of the nation.

#### **Settlement Terms:**

##### ***Injunctive Relief–***

- Substantial reductions of SO<sub>2</sub> and NO<sub>x</sub> and upgrade of PM controls.
  - Reduction of 37,500 tpy of SO<sub>2</sub> from existing units by 2013.
  - Reduction of 29,500 tpy of NO<sub>x</sub> from existing units by 2013.
  - Comply with declining system-wide caps for SO<sub>2</sub> and NO<sub>x</sub>.
- Surrender excess SO<sub>2</sub> allowances and restrict use of NO<sub>x</sub> allowances.
- Eighty-three percent of Santee Cooper's existing MWs (88% incorporating new units) will be controlled by state-of-the-art pollution controls for SO<sub>2</sub> (FGDs) and NO<sub>x</sub> (SCRs).
- Incorporate proposed Consent Decree requirements into enforceable permits.

***Environmentally Beneficial Projects***— Santee Cooper will spend at least \$4.5 million to finance environmental mitigation projects, including: \$1.25 million for a South Carolina Land Conservation Project, \$1 million for an Energy-Efficient Technologies Project, \$1 million for a Demand-Side Management Project, \$1 million for a Clean Diesel School Bus Project, and \$250,000 to implement an Environmental Management System.

***Civil Penalty***— Santee Cooper will pay a \$2 million civil penalty, \$700,000 of which will go to South Carolina.

**Location of Santee Cooper Coal-Burning Power Plants Covered Under Consent Decree:**

- Cross Plant - Pineville, Berkeley County, S.C., consisting of coal-fired units 1 (620 MW), 2 (540 MW), 3 (660 MW- to be constructed), and 4 (660 MW - to be constructed).
- Grainger Plant - Conway, Horry County, S.C., consisting of coal-fired units 1 (85 MW) and 2 (85 MW).
- Jefferies Plant - Moncks Corner, Berkeley County, S.C. and consisting of coal-fired unit 3 (153 MW) and 4 (153 MW), but not including units 1 and 2, which are oil-fired units.
- Winyah Plant - Georgetown, Georgetown County, S.C., consisting of coal-fired units 1 (295 MW), 2 (295 MW), 3 (295 MW), and 4 (270 MW).

Source: Office of Enforcement and Compliance Assurance and Region IV, U.S. EPA, March 16, 2004

